

INTERNATIONAL SEARCH REPORT

PCT/JP 03/15949

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B82B3/00 H01L21/00 C30B29/60			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 C23C B82B H01L C30B			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal, PAJ			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
X	US 6 309 554 B1 (MASUDA HIDEKI ET AL) 30 October 2001 (2001-10-30) the whole document	1,14	
X	& PATENT ABSTRACTS OF JAPAN vol. 2000, no. 4, 31 August 2000 (2000-08-31) & JP 2000 002392 A (UNIV TOKYO), 7 January 2000 (2000-01-07) cited in the application abstract	1,14	
X	US 6 359 288 B1 (DRESSELHAUS MILDRED S ET AL) 19 March 2002 (2002-03-19) column 4, line 56 -column 5, line 60	1,14	
X	US 5 581 091 A (MOSKOVITS MARTIN ET AL) 3 December 1996 (1996-12-03) figure 1; example 1	1,14	
	-/-		
<input checked="" type="checkbox"/>	Further documents are listed in the continuation of box C.	<input checked="" type="checkbox"/>	Patent family members are listed in annex.
° Special categories of cited documents :			
A document defining the general state of the art which is not considered to be of particular relevance		*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
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L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.	
O document referring to an oral disclosure, use, exhibition or other means		*&* document member of the same patent family	
P document published prior to the international filing date but later than the priority date claimed			
Date of the actual completion of the International search		Date of mailing of the International search report	
8 April 2004		21/04/2004	
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Cook, S	

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/118027 A1 (MARDILOVICH PETER ET AL) 29 August 2002 (2002-08-29) the whole document -----	1,14
X	US 6 185 961 B1 (NGUYEN PAUL P ET AL) 13 February 2001 (2001-02-13) claims 17,18 -----	1,14
X	US 6 231 744 B1 (DRESSELHAUS MILDRED S ET AL) 15 May 2001 (2001-05-15) the whole document -----	1,14

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Information on patent family members

PCT/JP 03/15949

Patent document cited in search report	Publication date	Patent family member(s)			Publication date
US 6309554	B1	30-10-2001	JP	3020155 B2	15-03-2000
			JP	2000001392 A	07-01-2000
			CA	2266803 A1	12-12-1999
US 6359288	B1	19-03-2002	US	6231744 B1	15-05-2001
			WO	9848456 A1	29-10-1998
US 5581091	A	03-12-1996	NONE		
US 2002118027	A1	29-08-2002	NONE		
US 6185961	B1	13-02-2001	NONE		
US 6231744	B1	15-05-2001	US	6359288 B1	19-03-2002
			WO	9848456 A1	29-10-1998